Amendments to the Claims:

 (Withdrawn) A wafer platform disposed within an ion implanter and including at least one wafer pad for mounting and cooling a wafer, the wafer pad assembly comprising:

a wafer support pad having an upper surface for mounting said wafer and a lower surface, said lower surface of said wafer support pad being connected to a coolant passage having an inlet section and an outlet section arranged in an opposed configuration, wherein a mass of said inlet section is counterbalanced by a mass of said outlet section.

- 2. (Amended) The wafer platform of claim 1 of claim 5, wherein an inlet end of said inlet section and an outlet end of said outlet are located proximate to the center of said upper surface.
- 3. (Amended) The wafer platform of claim 1 of claim 5, wherein said coolant passage is arranged in a serpentine configuration.
- 4. (Amended) The wafer platform of claim 1 of claim 5, wherein said inlet section and said outlet section are arranged in a symmetrical configuration.
- 5. (Amended) The wafer platform in claim 1 A wafer platform disposed within an ion implanter and including at least one wafer pad for mounting and cooling a wafer, the wafer pad assembly comprising:

a wafer support pad having an upper surface for mounting said wafer and a lower surface, said lower surface of said wafer support pad being connected to a coolant passage having an inlet section and an outlet section arranged in an opposed configuration, wherein a mass of said inlet section is counterbalanced by a mass of said outlet section;

wherein said lower surface of said wafer support is connected to a frame having an outer curved surface in mating engagement with a complementary shaped bearing surface of a housing wherein said wafer can be rotated about an axis.

6. (Original) The wafer platform of claim 5 wherein said bearing surface further

comprises a feed passageway and a return passageway in fluid communication with a feed line and a return line, respectively.

- 7. (Original) The wafer platform of claim 6 wherein said feed line and said return line are in fluid communication with the inlet and the outlet of the cooling passage, respectively.
- 8. (Original) The wafer platform of claim 5 wherein said frame further comprises a curved receway secured to the housing via one or more cam followers.
- 9. (Original) The wafer platform of claim 6 wherein the outer cureved surface og the frame functions to seal the feed and return passageways of the bearing surface.
- 10. (Amended) The wafer platform of claim-1-of claim 5, wherein said at least one wafer pad assembly comprises a plurality of wafer pad assemblies located thereon.
- 11. (Original) A wafer pad assembly for mounting a wafer and being disposed in an ion implanter, the wafer pad assembly comprising:
 - a wafer support pad having an surface being connected to a frame having an outer curved surface in mating engagement with a complementary shaped bearing surface of a housing wherein said wafer can be rotated about an axis.
- 12. (Original) The wafer pad assembly of claim 11 wherein said outer curved surface is convex.
- 13. (Original) The wafer pad assembly of claim 11 wherein said frame further comprises a curved raceway secured to the housing via one or more cam followers.
- 14. (Original) The wafer pad assemblyof claim 11 wherein said wafer is tiltable about an axis in the range of about 0 to about 45 degrees.
- 15. (Original) The wafer pad assembly of claim 11 wherein said frame further comprises opposed raceways secured to the housing via a plurality of cam followers.

- 16. (Original) The wafer pad assembly of claim 11 further comprising a cooling passage cinnected to the lower surface of said wafer support pad; said cooling passage having an inlet section and an outlet section, wherein a mass of said inlte section is counterbalanced by a mass of said outlet section.
- 17. (Original) The wafer pad assembly of claim 16 wherein said bearing surface further comprises a return passageway and a feed passageway, wherein said return passageway is in fluid communication with a return line and the outlet of the cooling passage; and said feed passageway is in fluid communication with the feed line and the inlet of the cooling passage.
- 18. (Original) The wafer pad assmebly of claim 16 wherein said bearing surface seals said return passageway and said feed passageway.